

PW-C1-1

Region of Peel

APPROVED AT REGIONAL COUNCIL
January 13, 2011

PW-C. WATER

PW-C1. Construction of the Countryside Drive Feedermain, Capital Project 08-1152, Document Numbers 2008-260P and 2009-830N – City of Brampton, Wards 9 and 10

Referred back to staff for discussion with City of Brampton Staff 2011-7

DATE: December 2, 2010

REPORT TITLE: **CONSTRUCTION OF THE COUNTRYSIDE DRIVE FEEDERMAIN
CAPITAL PROJECT 08-1152
DOCUMENT 2009-830N, 2008-260P
CITY OF BRAMPTON, WARDS 9 AND 10**

FROM: Dan Labrecque, Commissioner of Public Works

RECOMMENDATION

That the contract (Document 2009-830N) for construction services provided by London Excavators and Trucking Ltd. for the 600mm diameter feedermain along Countryside Drive, Part 2, between Bramalea Road and Airport Road, be extended to provide additional construction services, in the estimated amount of \$643,615 (excluding applicable taxes), under Capital Project 08-1152, for a new total commitment of \$6,190,447 (excluding applicable taxes), in accordance with Purchasing By-law 63-2008;

And further, that the contract (Document 2008-260P) for engineering and contract administration services provided by R.V. Anderson Associates Limited for the Countryside Drive Feedermain be extended to provide additional engineering and contract administration services, in the estimated amount of \$169,900 (excluding applicable taxes), under Capital Project 08-1152, for a new total commitment of \$714,780, (excluding applicable taxes), in accordance with Purchasing By-law 63-2008;

And further, that additional funds of \$774,195 (excluding applicable taxes) be provided to Capital Project 08-1152, financed from the DC Regional Water Reserve R3530 in the amount of \$489,842 (63.3 per cent) and from the Water Capital Financing Stabilization Reserve, R0241 in the amount of \$284,353 (36.7 per cent).

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REPORT HIGHLIGHTS

- The Municipal Environmental Secondary Plan (MESP) process for servicing lands north of Countryside Drive between Airport Road and Heart Lake Road has identified the need for additional watermains.
- Additional temporary watermain works were required to accelerate the ability to transfer water from east to west in order to accommodate demand during the expansion of the Lorne Park Water Treatment Plant and various other capital works projects.
- Costs associated with the construction of the temporary watermain works were not included in Document 2009-830N nor accounted for in the original Capital Budget for this project.
- Design scope changes have resulted in additional costs to the engineering and contract administration of the Countryside Drive Feedermain.
- Staff recommend that additional funding in the amount of \$774,195 (excluding applicable taxes) be provided to Project 08-1152 and financed from the DC Regional Water Reserve R3530 and from the Water Capital Financing Stabilization Reserve (R0241)

DISCUSSION

1. Background

The Municipal Environmental Secondary Plan (MESP) process for servicing of lands between Mayfield Road and Countryside Drive and from Heart Lake Road to Airport Road identified the need for new water infrastructure. The 600mm (24 inch) diameter feedermain along Countryside Drive between Dixie Road and Airport Road was advanced from 2012 to be completed before road reconstruction work proposed by the City of Brampton.

Under the current proposed schedule for the expansion of the Lorne Park Water Treatment Plant (LPWTP) staff concluded that there is a need to expand and enhance the ability for Peel to divert water from the eastern transmission system to the western transmission system. These enhancements will permit facilities with available capacities to be utilized to supply transmission pumping stations and reservoirs affected by the reduced plant capacity of the LPWTP during plant expansion. The enhancements will also permit a distinct level of redundancy to the transmission system across central Brampton in the long term.

One of the specific needs identified by staff is utilizing surplus capacity at the Airport Road pumping station to supply eastern and central sections of the Region's Zone 5 system. This permits reduction of output from western portions of the water transmission system. In order to facilitate this, the 600mm feedermain along Countryside Drive between Dixie Road and Airport Road needed to be accelerated.

In 2008 R. V. Anderson Associates Limited was awarded the consulting services for the design and contract administration of the Countryside Drive feedermain and in 2009 London Excavators and Trucking Ltd was awarded the construction of the 600mm diameter watermain along Countryside Drive Part 2.

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2. Project Scope Changes

In summer of 2010 two isolated locations of the 600mm (24 inch) feedermain remained incomplete and temporary works were determined to be the most suitable solution to accommodate water movement from east to west. A temporary 300mm (12 inch) diameter watermain was deemed acceptable to satisfy immediate demands, linking the existing 500mm (20 inch) watermain at Airport Road with the completed sections of the 600mm diameter feedermain on Countryside Drive.

The second location that remained incomplete was the creek crossing east of Bramalea Road. These works were delayed due to poor ground conditions and required modifications of the shoring system to ensure safe and feasible trenchless installation of the feedermain. This delay would be of longer duration so it was deemed appropriate to install a temporary aboveground 300mm diameter watermain between Sunny Meadow Boulevard and Moldovan Drive as well as repurposing the existing 300mm diameter watermain between the same locations, providing two separate 300mm diameter temporary watermains.

The temporary works permitted the completion of capital works in various parts of the treatment and transmission system without an impact to service levels.

The above mentioned scope changes have resulted in additional costs and extension of the project completion date. Design changes consist of multiple watercourse crossings redesigns, additional geotechnical work and environmental work at watercourse crossings and temporary watermain works.

FINANCIAL IMPLICATIONS

It is proposed that the budget for Capital Project 08-1152 be increased by additional funding in the amount of \$774,195 to be financed from the DC Regional Water Reserve R3530 in the amount of \$489,842 (63.3 per cent) and from the Water Capital Financing Stabilization Reserve, R0241 in the amount of \$284,353 (36.7 per cent). The cost breakdown as follows:

Miscellaneous External and Internal Charges to Date	\$196,680
Existing Construction Cost	\$8,015,199
Existing Engineering Costs	\$544,880
Additional Miscellaneous External and Internal Charges	\$25,000
Additional Construction Funding	\$643,615
Additional Engineering Funding	\$169,900
Subtotal	\$9,595,274
Available Capital Budget 08-1152	\$8,821,079
Required Additional Funding	\$774,195

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Dan Labrecque
Commissioner of Public Works

Approved for Submission:



D. Szwarc, Chief Administrative Officer

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c. Legislative Services
 J. Macintyre, Director, Purchasing
 J. Macintyre, Manager, Financial Support Unit (FSU)

APPENDIX I

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